

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/507,941	02/22/2000	Masato Ochiai	35.C14278	2960
5514	7590 08/28/2006		EXAM	INER
FITZPATRICK CELLA HARPER & SCINTO 30 ROCKEFELLER PLAZA			ENGLAND, DAVID E	
NEW YORK, NY 10112			ART UNIT	PAPER NUMBER

DATE MAILED: 08/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
Office Action Summary	09/507,941	OCHIAI, MASATO			
Office Action Summary	Examiner	Art Unit			
	David E. England	2143			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim rill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	the mailing date of this communication. D (35 U.S.C. § 133).			
Status					
1) Responsive to communication(s) filed on 16 Ma	ay 2006.				
· _ · · _	· · · · · · · · · · · · · · · · · · ·				
3) Since this application is in condition for allowar	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is				
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims					
4) ⊠ Claim(s) <u>1, 2, 4, 6, 8 – 10, 12, 13, 15, 17, 19 –</u> 4a) Of the above claim(s) is/are withdraw 5) □ Claim(s) is/are allowed. 6) ⊠ Claim(s) <u>1, 2, 4, 6, 8 – 10, 12, 13, 15, 17, 19 –</u> 7) □ Claim(s) is/are objected to. 8) □ Claim(s) are subject to restriction and/or	vn from consideration. 21, 34 and 47 – 49 is/are rejecte				
Application Papers	1				
·· ·					
9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correcting 11) The oath or declaration is objected to by the Expression 11.	on is required if the drawing(s) is obj	ected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. § 119		•			
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 					
Attachment(s)		•			
1) Notice of References Cited (PTO-892)	4) Interview Summary				
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 05/16/2006 	Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	ate atent Application (PTO-152)			

Art Unit: 2143

DETAILED ACTION

1. Claims 1, 2, 4, 6, 8 - 10, 12, 13, 15, 17, 19 – 21, 34 and 47 – 49 are presented for examination.

Claim Rejections - 35 USC § 101

2. Claim 34 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claim subject mater is directed to a computer program that is not embodied on any type of computer system and is therefore just does not define any structural and functional interrelationships between the data structure and other claimed aspects of the invention which permit the data structure's functionality to be realized. In contrast, a claimed computer-readable medium encoded with a data structure defines structural and functional interrelation ships between the data structure and computer software and hardware components with permit the data structure's functionality to be realized, and is thus statutory.

Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

- 4. Claims 1, 2, 4, 12, 13, 15, 34 and 47 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over RFC 2390 in view of what is well known in the art.
- 5. Referencing claim 1, as interpreted by the Examiner, RFC 2390 teaches a network apparatus comprising:
- 6. a receiving unit adapted to receive data from a network, (e.g., pages 1 8);
- 7. a setting unit adapted to set a destination logic address of the received data as a logic address of said network apparatus in a case where the detected value indicative of a destination physical address of the received data and a physical address of said network apparatus are the same, (e.g., pages 1 8);
- 8. What RFC 2390 does not specifically teach is the data length is a predetermined value; and
- 9. a detecting unit adapted to detect a value indicative of a data length in a packet header of the data received by said receiving unit, the packet header being provided for a predetermined protocol.
- 10. It is well known in the art that the utilization of RFC 2390 has the headers of TCP/IP. Therefore, it is well known in the art that TCP/IP utilizes a check sum or cyclic redundancy check (CRC) which is a common technique for detecting data transmission errors. Transmitted messages are divided into predetermined lengths that are divided by a fixed divisor. According to the calculation, the remainder number is appended onto and sent with the message. When the message is received, the computer recalculates the remainder and compares it to the transmitted remainder. If the numbers do not match, an error is detected. Therefore, if an error is detected the

Application/Control Number: 09/507,941 Page 4

Art Unit: 2143

packed is no longer valid and discarded. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to check if the data length is correct or the packets would be in error and the packet would be discarded.

- 11. Referencing claim 2, as interpreted by the Examiner, RFC 2390 teaches all that is similar in nature above herein out. RFC 2390 further teaches in a case where the destination logic address of the received data and the logic address of said network apparatus differ, (e.g., pages 1 8, the destination address is null or zeros which is differ from the actual destination logic address of the network apparatus), the destination physical address of the received data and the physical address of said network apparatus are the same, and the detected value indicative of the data length is the predetermined value, said setting unit sets the destination logic address of the received data as logic address of said network, (e.g., pages 1 8).
- 12. Referencing claim 4, RFC 2390 said physical address is a media access control address, and the logic address is an Internet protocol address, (e.g. pages 1 8).
- 13. Claims 12, 13, 15, 34 and 47 49 are rejected for similar reasons as stated above.
- 14. Claims 6, 9, 10, 17, 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over RFC 2390 in view of Anderson et al. (5850388) (hereinafter Anderson).

Application/Control Number: 09/507,941

Art Unit: 2143

15. Referencing claim 6, as closely interpreted by the Examiner, RFC 2390 teaches all that is

Page 5

similar in nature above that can be applied herein out. RFC 2390 teaches the use of Inverse ARP,

which is part of TCP/IP protocol and could be considered a type of echo request that is utilized to

find IP addresses from different devices.

16. Anderson teaches the received data is an ICMP echo message by an ICMP protocol and

the value indicates a data length of the ICMP echo message, (e.g. col. 12, lines 22 - 56 & col. 20,

line 54 – col. 21, line 30). It would have been obvious to one of ordinary skill in the art at the

time the invention was made to combine Anderson with RFC 2390 because using an ICMP echo

is not only well known in the computer arts to aid in finding devices on a network. Furthermore,

utilizing a data length, sometimes known as a "checksum" or "CRC", allows the end system to

check for errors in the packet if the data length is not to the predetermined length.

- 17. Claims 9, 10, 17, 20 and 21 are rejected for similar reasons stated above.
- 18. Claims 8 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over RFC 2390 in view of Kano et al. (6310858) (hereinafter Kano).
- 19. As per claim 8, as closely interpreted by the Examiner, RFC 2390 a network apparatus comprising:
- 20. a receiving unit adapted to receive data from a network, (e.g. pages 1 8);

Application/Control Number: 09/507,941 Page 6

Art Unit: 2143

21. a detecting unit adapted to detect a value in a packet header of the data received by said

receiving unit, the packet header being provided for a predetermined protocol, (e.g. pages 1 - 8);

and

22. a setting unit adapted to set a destination logic address of the received data as a logic

address of said network apparatus in a case where the detected value is a predetermined value

and a destination physical address of the received data and a physical address of said network

apparatus are the same, (e.g. pages 1 - 8), but does not specifically teach detecting TTL. Kano

teaches detecting TTL, (e.g., col. 4, lines 40 - 65). It would have been obvious to one of ordinary

skill in the art at the time the invention was made to combine Kano with RFC 2390 because if

the TTL value is not greater than a specific number than the packet will be terminated and

returned to the sender indicating that the device is not within the allotted hop count given and the

device would have to send out another packet with a higher TTL number in order to reach the

destination device.

23. Claim 19 is rejected for similar reasons stated above.

Response to Arguments

24. Applicant's arguments with respect to claims 1, 2, 4, 6, 8 - 10, 12, 13, 15, 17, 19 - 21, 34

and 47 – 49 have been considered but are most in view of the new ground(s) of rejection.

Conclusion

Application/Control Number: 09/507,941 Page 7

Art Unit: 2143

25. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- 26. a. Aggarwal et al. U.S. Patent No. 5675741 discloses Method and apparatus for determining a communications path between two nodes in an Internet Protocol (IP) network.
- 27. b. Fujimori et al. U.S. Patent No. 6438607 discloses System using ARP or RARP packet for communicating offset address of an application program and computer unique ID of a computer.
- 28. c. Finlayson et al., RFC 903 A Reverse Address Resolution Protocol, RFC 903.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David E. England whose telephone number is 571-272-3912. The examiner can normally be reached on Mon-Thur, 7:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Wiley can be reached on 571-272-3923. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2143

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

David E. England Examiner Art Unit 2143

DE NZ

SUPERVISORY PATENT EXAMINE